

Atty. Docket No.: VI/99-016.C

REMARKS

This Response and Amendment is in response to the Office Action mailed on May 7, 2004. Reconsideration of this application is respectfully requested.

Allowable Subject Matter

Applicants acknowledge, with appreciation, the allowance of Claims 31-33 and 39-41.

Prior Art Rejections

1. The Office Action rejected Claims 1-4, 6-22, 24-30, and 34-36 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,553,619 to Prince ("the Prince patent"). This rejection is respectfully traversed.

The various rejected independent claims generally require, inter alia, a first phase of an injection protocol or procedure as a flushing medium phase. As such, the flushing medium is injected into the patient during or as part of an actual injection procedure or protocol, and prior to a subsequent injection of contrast medium.

The Prince patent, as cited in the Office Action, discloses that "as soon as the infusion of the contrast agent is complete, the drip infusion will automatically resume to 'flush' gadolinium within the intravenous tubing." (Col. 18, lines 42-44.) This flushing medium phase would necessarily occur only during or after the injection of the contrast fluid, not before a contrast medium phase, as claimed.

The applicants' application in one preferred embodiment:

broadly contemplates a fluid injection arrangement, in the context of patient imaging systems, in which phases of contrast medium injection

Atty. Docket No.: VI/99-016.C

and flushing medium injection can be freely and selectably ordered so as to make available to the operator and patient a vast arrays of protocols that has hitherto been essentially unattainable. (P. 4-5, Lines 28-29, 1-2) (emphasis added)

The Prince patent only contemplates a contrast injection phase followed by a saline injection phase to flush the contrast agent out of the tubing and into the patient. Prince does not disclose or contemplate a first injection of a flushing medium followed by a contrast agent.

Further, the Prince patent does not disclose a programmable phase arrangement for "selectably establishing" first and second injection phases. Rather, it discusses a flushing phase that occurs "as soon as the infusion of the contrast agent is complete." (Col. 18 Line 42) This does not rise to a means for "selectably" establishing a first and subsequent second protocol phases as set forth, for example, in claims 7, 10, 15, 18, 24, 27, and 35.

Based on at least the above reasons, Applicants submit that the Prince patent does not anticipate the Applicants' claimed inventions, and that the rejections of claims 1-4, 6-22, 24-30, and 34-36.

2. The office action rejected claims 5, 23, 37, and 38 under 35 U.S.C. 103(a) as being unpatentable over Prince as applied to claims 1, 6, 14, and 22 above, and further in view of U.S. Patent No. 5, 573, 515 to Wilson et al ("the Wilson patent"). This rejection is respectfully traversed.

Rejected claims 5, 23, 37, and 38 depend from the independent claims 1, 6, 14, and 22, which generally require, inter alia, a first phase of an injection protocol or procedure as a flushing medium phase. As such, the flushing medium is injected into the

Atty. Docket No.: VI/99-016.C

patient during or as part of an actual injection procedure or protocol before a subsequent injection of contrast medium.

The Wilson patent does not disclose an embodiment in which the flushing medium phase occurs as the first phase of the procedure. For at least that reason, the Wilson patent does not disclose any more than the Prince patent in this regard.

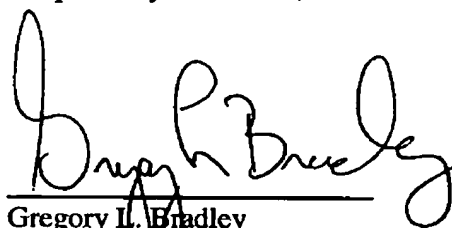
Based on at least the above reasons, Applicants submit that the Wilson and the Prince patent do not render obvious the Applicants' claimed inventions, and that the rejections of claims 5, 23, 37, and 38 based thereon should be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, Applicants submit that the application is now in condition for allowance. Reconsideration of this application is respectfully requested.

Date: August 6, 2004

Respectfully Submitted,



Gregory L. Bradley
Reg. No. 34,299

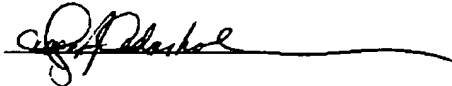
Medrad, Inc.
One Medrad Drive
Indianola, PA 15051
(412) 767-2400 x3021

Atty. Docket No.: VI/99-016.C

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being facsimile transmitted to the U.S. Patent and Trademark Office (Fax No. 703-872-9306) on August 6, 2004.

Page A. Cedarholm

A handwritten signature in black ink, appearing to read "Page A. Cedarholm", followed by a long horizontal line extending to the right.